

Lane Construction
Waldo County
Prospect, Maine
A-49-71-H-A

Departmental
Findings of Fact and Order
Air Emission License
Amendment #2

After review of the air emission license amendment application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

The Lane Construction Corporation (Lane), located in Prospect, Maine was issued Air Emission License A-49-71-F-N on August 30, 1999 permitting the operation of emission sources associated with their hot mix asphalt plant, concrete batch plant, and their crushed stone and gravel facility. The license was subsequently amended on November 16, 2000, A-49-71-G-M.

Lane has requested a minor modification to add a primary rock crusher and a new diesel drive to this license.

B. Revised Emission Equipment

Rock Crushers:

<u>Designation</u>	<u>Process Rate (tons/hour)</u>	<u>Control Device</u>	<u>Date of Manufacture</u>
Primary	125	Spray Nozzle	1951
Secondary	175	Spray Nozzle	Pre-1973

***Bold** depicts new unit.

Diesel Units:

<u>Source ID</u>	<u>Max. Capacity</u>	<u>Max. Firing Rate</u>	<u>Power Output</u>
Diesel Drive	2.1 MMBtu/hr	15.2 gal/hr, 0.5%S	300 hp
Diesel N14PB	1.21 MMBtu/hr	8.8 gal/hr, 0.5%S	173 hp
Genset #1	1.7 MMBtu/hr	12.3 gal/hr, 0.5%S	242 hp

***Bold** depicts new unit.

C. Application Classification

The application for Lane includes the licensing of increased emissions, therefore the license is considered to be a minor modification.

II. BEST PRACTICAL TREATMENT

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in Chapter 100 of the Air Regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in Chapter 100 of the Air Regulations. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

B. Rock Crushers

The new primary rock crusher is a stationary unit manufactured in 1951 with rated capacity of 125 tons/hr. The existing secondary rock crusher has a rated capacity of 175 tons/hr. Although the units were manufactured prior to 1983, to comply with EPA NSPS Subpart OOO for Nonmetallic Mineral Processing Plants, Lane must perform an initial performance test on the rock crusher per the applicable sections of 40 CFR Part 60, Subpart OOO, §60.675.

The regulated pollutant from the rock crushers is particulate emissions. To meet the requirements of BACT for control of particulate matter (PM) emissions from the rock crushers, Lane shall operate and maintain water sprays on the rock crushers as needed. Visible emissions from the rock crushers shall be limited to no greater than 10% opacity on a six (6) minute block average basis.

C. New Diesel N14PB

Diesel N14PB has an approximate power rating of 173 HP, based on a heat input of 1.7 MMBtu/hr and 35% efficiency. BACT for the diesel unit is the following:

1. Annual fuel use in the diesel units remains unchanged at 36,000 gallons per year, 12-month rolling total.
2. Chapter 106 regulates fuel sulfur content, however the use of 0.5% sulfur by weight fuel is more stringent and shall be used.
3. SO₂ emission data was based on fuel sulfur mass balance.
4. NO_x, CO and VOC emission limits are based upon AP-42 data dated 10/96 for diesel engines less than 600 horsepower.
5. PM and PM₁₀ emission rates were based upon BACT of 0.12 #/MMBtu.
6. Opacity from Diesel N14PB shall not exceed 30% on a six (6) minute block average basis, except for two (2) six (6) minute block averages in a 3-hour period.

D. General Process Emissions

Visible emissions from a general process (including conveyor belts) shall not exceed an opacity of 10% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period.

ORDER

Based on the above Findings and subject to conditions listed below the Department concludes that the emissions from this source:

will receive Best Practical Treatment,
will not violate applicable emission standards,
will not violate applicable ambient air quality standards in
conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-49-71-H-A, subject to the conditions in license A-49-71-F-N, amendment A-49-71-G-M and in addition to the following conditions:

The following shall replace Condition (18) of Air Emission License A-49-71-F-N:

(18) Rock Crushers

- A. Lane shall install and maintain spray nozzles for particulate control on the Primary and Secondary Rock Crushers and operate them as necessary to limit visible emissions to no greater than 10% opacity on a six (6) minute block average basis. [MEDEP Chapters 115 BPT/BACT and 101]
- B. Lane shall maintain a log detailing the maintenance on the water spray nozzles. The maintenance log shall be kept on-site at the rock crushing location. [MEDEP Chapter 115, BPT/BACT]
- C. Lane shall maintain a log detailing and quantifying the hours of operation on a daily basis for the primary and secondary rock crushers. The operation log shall be kept on-site at the rock crushing location. [MEDEP Chapter 115, BPT/BACT]
- D. Lane shall have an initial performance test performed on the primary and secondary rock crushers per the applicable sections of 40 CFR Part 60, Subpart OOO, §60.675. The performance test shall be completed within 60 days after achieving the maximum production rate during the 2004 season, but no later than 180 days after initial startup of the unit for the 2004 season. Lane shall submit a test notice to the regional inspector at least 30 days prior to the performance test. Any rescheduled test requires a seven (7) day notice to the regional inspector. [MEDEP Chapter 115 BPT/BACT, 40 CFR Part 60, Subpart OOO]

The following shall replace Condition (19) of Air Emission License A-49-71-F-N:

(19) **Diesel Units**

A. Fuel use in the diesel units shall not exceed 36,000 gal/year of diesel fuel (12 month rolling total), with a sulfur content not to exceed 0.5% by weight. Fuel use records and receipts (showing the quantity and percent sulfur of the fuel) for the diesel engine shall be maintained to demonstrate compliance. [MEDEP Chapter 115, BPT]

B. Emissions from the diesel units shall be limited to the following:

Pollutant	Diesel Drive lb/hr	Genset 1 lb/hr	Diesel N14PB lb/hr
PM	0.65	0.53	0.15
PM ₁₀	0.65	0.53	0.15
SO ₂	1.06	0.86	0.62
NO _x	9.26	7.50	5.34
CO	2.00	1.62	1.15
VOC	0.74	0.60	0.42

C. Visible emissions from each diesel unit shall not exceed 30% on a six (6) minute block average basis, except for two (2) six (6) minute block averages in a 3-hour period. [MEDEP Chapter 101]

The following shall replace Condition (20) of Air Emission License A-49-71-F-N:

(20) **Stockpiles and Roadways**

Visible emissions from a fugitive emission source shall not exceed an opacity of 20 percent, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20 percent in any one (1) hour. [MEDEP Chapter 101]

The following are new conditions.

(26) **General Process Sources**

Visible emissions from any general process source shall (including conveyor belts) not exceed an opacity of 10% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period. [MEDEP Chapter 101 and Chapter 115, BPT]

(27) **Annual Emission Statement** [MEDEP Chapter 137]

In accordance with MEDEP Chapter 137, the licensee shall annually report to the Department the information necessary to accurately update the State's emission inventory by means of:

- 1) A computer program and accompanying instructions supplied by the Department;
or
- 2) A written emission statement containing the information required in MEDEP Chapter 137.

Reports and questions should be directed to:

Attn: Criteria Emission Inventory Coordinator
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017

Phone: (207) 287-2437

The emission statement must be submitted by September 1 or as otherwise specified in Chapter 137.

(28) **Payment of Fees**

Lane shall pay the annual air emission license fee within 30 days of **June 30th** of each year. Pursuant to 38 MRSA §353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for revocation of the license under 38 MRSA §341-D, subsection 3. [38 MRSA §353-A]

DONE AND DATED IN AUGUSTA, MAINE THIS _____ DAY OF _____ 2004.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
DAWN R. GALLAGHER, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-49-71-F-N

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: December 18, 2003

Date of application acceptance: January 6, 2004

Date filed with the Board of Environmental Protection: _____

This order prepared by Mark E. Roberts, Bureau of Air Quality.